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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
097718,685	11/21/00	VAISBERG	E CYTOP007C2

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HM12/1023

EXAMINER SHEINBERG, M

ART UNIT 1631	PAPER NUMBER
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DATE MAILED: 10/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/718,685

Applicant(s)

VAISBERG ET AL.

Examiner

Monika B. Sheinberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/13/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-39 and 46-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-48 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 14 August 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) 2 pages 1 sheet
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Claims 1-39 and 46-48 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected groups, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6, filed August 14, 2001.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 40 is rejected due to the lack of clarity in the claim language "capturing a [...] value from [...] said cells being manipulated", lines 3-4. It is unclear whether the action of capturing the morphological value occurs during the action of manipulation or after the cell has been manipulated. Thus claims 41-45 which are dependent from claim 40 are rendered vague and indefinite (claims 41-45).

In addition, claim 40 is rejected due to the lack of clarity in determining a relationship between two components of a cell. It is unclear what the metes and bounds of what is being determined as related between the components. Thus claims 41-45 which are dependent from claim 40 are rendered vague and indefinite (claims 41-45).

Claim 40 is vague and indefinite in the manner that is the body of the claim does not set forth that which the preamble sets out to perform, “mapping a manipulation of cells” line 1. No where in the body of the claim, is there a coded action for “mapping” anything. Thus it is unclear whether claim 40 is a program product for mapping or analysis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 40-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Giuliano et al. (*J. of Biomol. Screening*, 1997).

Giuliano et al. demonstrates a system, ArrayScan System, which contains specific software in order to complete the system’s “comprehensive data analysis package” (Fig. 8). In addition Figure 8 demonstrates the assignment and storage morphological values in the captured images of “morphometric data from a single cell” that is detailed on a spreadsheet and a plot. The high-content screening described by Giuliano et al. provides measurements of nuclear size and shape changes, nuclear DNA content, mitochondrial potential, and actin-cytoskeletal rearrangements of a plurality of cells as a result of the described receptor interaction, thus covering claims 41 and 44 (abstract, lines 9-11). The sources of manipulation recited in claim 42 such as thermal, biological, and temporal are demonstrated by the system on page 252 in its ability to control “temperature, humidity, and gas for time series” (1st column, 3rd paragraph).

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The chemical source of manipulation in claim 43 is demonstrated by Figure 7, which displays a user interface depicting data collection from cells displaying results from drug testing. The degree of presence of claim 45 is demonstrated by the measurement of cellular brightness described on page 254 (1st column, 2nd paragraph: d). Thus Giuliano et al. anticipates the instant claims 40-45 in his system ArrayScan.

No claim is allowed.

Informalities

Claim 40 contains a misspelling of the word “manupulated” line 4.

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code as seen in the specification on page 45, line 26. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code on the page indicated as well as elsewhere in the application. See MPEP § 608.01.

Inquiries

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242, or (703) 308-4028.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monika B. Sheinberg, whose telephone number is (703) 306-0511. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703) 305-3524, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

October 19, 2001

Monika B. Sheinberg
Art Unit 1631

MB

Ardin H. Marschel
ARDIN H. MARSCHEL
PRIMARY EXAMINER